

Appl. No. 10/754,389
Amtd. Dated: January 31, 2005
Reply to Office Action of November 1, 2004

REMARKS

Claims 1-8 are pending in the Application. Claims 1-2, 6 and 8 are rejected. Claims 3-5 and 7 are objected, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-3 and 7-8 have been amended, and new claims 9-13 have been added. Support for the amendment is found in the entire specification. Page 3, lines 28-30 of the specification and Fig. 2 of the application, for example, show the curved projecting part having a cross section elongated along the printed circuit board, as recited in claims 1, 9 and 13; Page 6, lines 22-24 of the specification show providing the printed circuit board within a mold having at least one cavity; and injecting resin material into the at least one cavity of the mold to form a resin package having at least one curved projecting part corresponding to the at least one cavity of the mold, as recited in claim 8; and Page 6, lines 30-31 of the specification and Figs. 2 and 12 of the application show the feature as recited in claim 13. No new matter has been added by the amendment.

Claim Objections

Claim 7 stands objected to because of informalities. Claim 7 has been amended to put a period at the end of the claim 7. Withdrawal of the claim objection is respectfully requested.

Claim Rejections Under 35 U.S.C. §102

Claims 1-2, 6 and 8 stand rejected under 35 U.S.C. §102(e) as being anticipated by Lee et al., US 2004/0070001 (hereinafter "Lee") for the reasons stated on pages 2-3 of the Office Action.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). However, Lee does not disclose or teach each and every element as set forth in the claim 1 for at least the reasons described below.

Claim 1 recites a chip light emitting diode comprising: a metal pad and a lead spaced away from each other on a printed circuit board; a light emitting chip mounted on the metal pad; a wire connecting the light emitting chip and the lead; and a resin

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package sealing the light emitting chip and at least a part of the metal pad, lead, and the wire, the resin package having at least one curved projecting part, the at least one curved projecting part having a cross section elongated along the printed circuit board. Page 3, lines 28-30 of the specification disclose that the resin package is formed protruding from the printed circuit board. Thus, the curved projecting part of the resin package, in claim 1, has a cross section elongated along the printed circuit board.

In contrary, paragraph [0014] of Lee simply discloses that the LED chip (2) is covered by the protective lid (4) of the resin with fluorescer. There is no disclosure or teaching in Lee that the cross section of the protective lid (4) elongates along the base plate (1). Thus, Lee neither discloses nor teaches the feature "the at least one curved projecting part having a cross section elongated along the printed circuit board", as recited in claim 1. Accordingly, Lee neither anticipates nor render claim 1 obvious. Claims 2 and 6 are believed to be allowable due to their dependency on claim 1.

Claim 8 recites a fabrication method of a chip light emitting diode, comprising: mounting a light emitting chip on a metal pad formed on a printed circuit board; connecting the light emitting chip to a lead formed on the printed circuit board with a wire; providing the printed circuit board within a mold having at least one cavity; and injecting resin material into the at least one cavity of the mold to form a resin package having at least one curved projecting part corresponding to the at least one cavity of the mold, the resin package sealing the light emitting chip and at least a part of the metal pad and at least a part of the lead. In claim 8, the resin package is formed by injecting the resin material into the at least one cavity of the mold. Thus, the resin package includes at least one curved projecting part, which corresponds to the at least one cavity of the mold.

In contrary, Lee is silent neither in injecting the resin material into the at least one cavity of the mold nor in forming the resin package including at least one curved projecting part having corresponding to the at least one cavity of the mold. Thus, Lee neither discloses nor teaches the feature "injecting resin material into the at least one cavity of the mold to form a resin package having at least one curved projecting part corresponding to the at least one cavity of the mold", as recited in claim 8.

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Accordingly, Lee neither anticipates nor render claim 8 obvious. Since it contains similar features, new claim 13 is believed to be allowable for at least the reasons given for claim 8. New claims 9-12 are believed to be allowable due to their dependency on claim 8.

Conclusion

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

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